

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C07K14/29 C12N15/31 C07K16/12 A61K39/02 A61K39/295

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12N C07K A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, WPI Data, PAJ, EMBASE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 01/68865 A (AQUA HEALTH LIMITED; SIMARD, NATHALIE; BROUWERS, HUUB; JONES, SIMON;) 20 September 2001 (2001-09-20)	2,8-14, 19
Y	page 7 - page 8; figure 7	1-14,18, 19, 31-33,36
X	----- LEONG J C ET AL: "FISH VACCINE ANTIGENS PRODUCED OR DELIVERED BY RECOMBINANT DNA TECHNOLOGIES" DEVELOPMENTS IN BIOLOGICAL STANDARDIZATION, KARGER, BASEL, CH, vol. 90, 1997, pages 267-277, XP001062656 ISSN: 0301-5149	37-42
Y	page 272, paragraph 3 page 270, line 10 - line 16; table 1 ----- -/--	15-17, 20-24

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

4 May 2005

Date of mailing of the international search report

24/05/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-2016

Authorized officer

Heiduschat, C

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>VALENZUELA PDT ET AL.: "Sequence and applications of the Piscirickettsia salmonis genome" BIOLOGICAL RESEARCH, 'Online! vol. 34, no. 3-4, 2001, pages R-17, XP002325385 ISSN: 0716-9760 Retrieved from the Internet: URL: http://www.scielo.cl/scielo.php?script=sci_arttext&pid=S0716-97602001000300012&lng=en&nrm=iso 'retrieved on 2005-04-14! Abstract of presentation at Symposium at following conference: XLIV ANNUAL MEETING OF THE SOCIEDAD DE BIOLOGIA DE CHILE (BIOLOGY SOCIETY OF CHILE); PUCON, CHILE; NOVEMBER 06-10, 2001 abstract</p>	1-14, 18, 19, 31-33, 36
Y	<p>WO 02/38770 A (THE UNIVERSITY COURT OF THE UNIVERSITY OF ABERDEEN; MELVIN, WILLIAM, T) 16 May 2002 (2002-05-16) cited in the application page 19 - page 38; examples 1-5</p>	25-29, 31-36
P, Y	<p>MIQUEL ALVARO ET AL: "Immunoresponse of Coho salmon immunized with a gene expression library from Piscirickettsia salmonis." BIOLOGICAL RESEARCH, vol. 36, no. 3-4, 2003, pages 313-323, XP002325386 ISSN: 0716-9760</p>	1-16, 18-21
Y	<p>page 314, left-hand column, paragraph 2 - page 316, right-hand column, paragraph 3 page 322, right-hand column, paragraph 2 - page 323, left-hand column, paragraph 1</p>	17, 22-36
Y	<p>WILHELM VIVIAN ET AL: "The complete sequence of the mitochondrial genome of the Chinook salmon, Oncorhynchus tshawytscha." BIOLOGICAL RESEARCH, vol. 36, no. 2, 2003, pages 223-231, XP009046676 ISSN: 0716-9760 page 223, right-hand column, last paragraph - page 225, left-hand column, paragraph 2</p>	1-36
	----- -/--	

INTERNATIONAL SEARCH REPORT

In: International Application No
PCT/US2004/003339

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>DATABASE BIOSIS 'Online! BIOSCIENCES INFORMATION SERVICE, PHILADELPHIA, PA, US; 2002, HENRIQUEZ V B ET AL: "Improved purification of the obligate intracellular bacteria Piscirickettsia salmonis by iodixanol density gradient centrifugation" XP002325615 Database accession no. PREV200200597234 abstract & ABSTRACTS OF THE GENERAL MEETING OF THE AMERICAN SOCIETY FOR MICROBIOLOGY, vol. 102, 2002, page 259, 102ND GENERAL MEETING OF THE AMERICAN SOCIETY FOR MICROBIOLOGY; SALT LAKE CITY, UT, USA; MAY 19-23, 2002 ISSN: 1060-2011</p>	1-36
Y	<p>HENRIQUEZ VITALIA ET AL: "An alternative efficient procedure for purification of the obligate intracellular fish bacterial pathogen Piscirickettsia salmonis." APPLIED AND ENVIRONMENTAL MICROBIOLOGY, vol. 69, no. 10, October 2003 (2003-10), pages 6268-6271, XP001206212 ISSN: 0099-2240 the whole document</p>	1-36
Y	<p>RUESSMANN HOLGER ET AL: "Attenuated Yersinia pseudotuberculosis carrier vaccine for simultaneous antigen-specific CD4 and CD8 T-cell induction." INFECTION AND IMMUNITY, vol. 71, no. 6, June 2003 (2003-06), pages 3463-3472, XP002325391 ISSN: 0019-9567</p>	15-17, 20-36
X	<p>page 3463, line 1 - page 3464, left-hand column, paragraph 2 page 3469, left-hand column, paragraph 2 - page 3470, right-hand column, paragraph 3</p>	37,42
A	<p>KUZYK M A ET AL: "ANTIGENIC CHARACTERIZATION OF THE SALMONID PATHOGEN PISCIRICKETTSIASALMONIS" INFECTION AND IMMUNITY, AMERICAN SOCIETY FOR MICROBIOLOGY. WASHINGTON, US, vol. 64, no. 12, December 1996 (1996-12), pages 5205-5210, XP001029511 ISSN: 0019-9567 page 5206, right-hand column, paragraph 4 - page 5209, left-hand column, paragraph 2</p>	1-36

INTERNATIONAL SEARCH REPORT

Information on patent family members

I. International Application No

PCT/IB2004/003339

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 0168865	A	20-09-2001	CA 2407301 A1	18-03-2004
			AU 4079101 A	24-09-2001
			CA 2402718 A1	20-09-2001
			DK 200201270 A	03-02-2003
			EP 1282710 A2	12-02-2003
			WO 0168865 A2	20-09-2001
			NO 20024322 A	10-09-2002
			US 2003138446 A1	24-07-2003
WO 0238770	A	16-05-2002	AU 1255502 A	21-05-2002
			CA 2428027 A1	16-05-2002
			EP 1334197 A1	13-08-2003
			WO 0238770 A1	16-05-2002
			NO 20032097 A	10-07-2003